

Application No. 10/578,083
Amendment Dated: July 11, 2008
Reply to Office Action of: April 11, 2008

REMARKS/ARGUMENTS

Claims 1-21 have been canceled and new claims 22-43 have been added. Reconsideration of rejection of this application in view of the above amendments and the following remarks is respectfully requested.

Drawings

The drawings have been rejected under 37 CFR 1.83(a). It is the Examiner's opinion that certain features of original claims 17 and 18 were not shown in the drawings. Specifically, the Examiner felt that the features encompassed by the claim language "each of said second wheel ... freely connected said upper portion" were not shown in the drawings. The general features of original claim 17 are now incorporated in new claim 39. However, the claim language of new claim 39 has been clarified so that it now reads on the embodiment in Figure 13 and, thus, is shown in the drawings.

Regarding claim 18, the Examiner felt that the feature "each of said second wheels ... by rotation of said second wheels" is not shown in the drawings. The language of original claim 18 has been incorporated into newly submitted claim 40. It is submitted that the feature of this claim is properly shown in the drawings, especially Figure 14(F). Additionally, the description of Figure 14(F) at page 7, last paragraph wherein it is stated that Figure 14(F) combines the embodiments of Figures 14(B) – (F) and the embodiments are mounted on

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extension 410 and an embodiment is selected by pulling, rotating and releasing the extension supports the contention that Figure 14(F) does show the feature of claim 40. Accordingly it is submitted that the features of new claim 40 are properly shown in the drawings.

Claim Objections

Claim 1 was objected to because of certain terminology that was considered grammatically improper. The claims have been rewritten and this terminology has been omitted. Therefore, this objection no longer pertains.

Claim rejections-35 U.S.C §102

Claims 1, 4-6 and 21 were rejected under 35 U.S.C. §102(b) as being anticipated by the Kim U.S. Publication No. 2001/0038786. In view of the newly submitted claims, it is submitted that the Kim reference is no longer anticipatory of the claimed subject matter.

New claim 22, the only independent claim now in the application, sets forth a lifting device which comprises a column generally vertical when the lifting device is in an operating position. The column includes two rear channels extending the length of the column and which have a passageway open to the front of the column and two forwardly open channels extending the length of the column. A carriage positioned to the front of the column is generally horizontal when the lifting device is in an operating position. A pair of spaced forks is

provided at one end of the carriage, having one end connected to the carriage and the other end free. At least one rear bearing is provided adjacent the free end of each of the forks. A fork bearing is provided on each fork positioned downwardly and forwardly from the rear bearing. The rear bearing of one said forks rides in one of the rear channels and the rear bearing of the other fork rides in the other of said rear channels. The fork bearing of one fork rides in one of the forwardly open channels and the fork bearing of the other of said forks rides in the other said forwardly open channels.

Thus, as claimed, the lifting device includes a column on which a carriage is operatively connected for up and down movement. The carriage is connected to the column by means of rear bearings on spaced forks positioned in channels in the column and fork bearings on the spaced forks which ride along open channels in the column. With this arrangement, the rear bearings are contained while the front fork bearings merely ride in the channel such that the carriage can be pivoted around the rear bearings when it is desired to collapse the device.

The arrangement of the carriage or platform and supporting structure of the Kim device is completely different from that claimed. In the Kim device, the platform has rollers 22 which are mounted in the guide rails 14 of a frame. There is no teaching or suggestion in the Kim patent of providing a column and carriage with forks having rear bearings mounted in rear channels in the column and lower fork bearings riding in forwardly open channels in the column.

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In order for a reference to provide a basis for anticipating a claim, the reference must disclose each and every element of the claim. *Verdegaal Bros., Inc. v. Union Oil Co.*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As discussed above Kim does not show all the limitations of claim 22 and, accordingly, claim 22 is not anticipated and is patentable over the Kim reference.

New claim 23 sets forth that the lifting device includes a slide having two ears, and that the column has two flanges. The ears on the slide engage the flanges to support the slide for movement along the column. A lead screw engages the slide to move the slide along the column upon rotation of the lead screw. The slide is operatively connected to the forks to move the forks along the column as the lead screw is rotated.

Referring to the Kim patent, the lead screw is connected to the platform through mounting unit 30. The mounting unit 30 is attached to the platform and operatively connected to the lead screw through gearing. There is no slide member in the Kim device which rides along a column and which is connected to the platform or carriage as set forth in Claim 23. According to claim 23 it is patentable for this reason as well as for the reasons set forth in connection with its parent claim 22.

Original claims 1, 6 and 7 were rejected under 35 U.S.C. 102 (b) as being anticipated by Neal et al U.S. Publication No. 2002/0109319. It is submitted that there is no disclosure in this publication that anticipates the claims as currently presented. Referring to the embodiment shown in Figure 42 and 43

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of the Neal et al publication, the platform or carriage 912 is attached to a support guide 914 which is mounted about a guide rod 916. There is no channel in the guide rod and the carriage member of the Neal publication does not include any forks having bearings that are mounted in a channel as set forth in the claims. As Neal et al does not disclose or suggest every element of the claim, new claim 22 and its dependent claims are not anticipated by and are patentable over the Neal et al publication.

Original Claims 1, 13, and 14 were rejected under 35 U.S.C. 102(b) as being anticipated by the Rhodes U.S. Patent No. 3,907,138. The Rhodes patent discloses a hand truck in which the carriage or platform 35 is used to support a load while the frame along with the wheels is raised relative to the platform. This is a different operation than set forth in the claims in which the carriage used to support a load is raised relative to the column. In Rhodes, the connection of the platform to the frame is by means of rollers in a U-shaped channel. There are no forks having bearings mounted in channels in a column as claimed in new claim 22. Accordingly, the Rhodes patent does not disclose each and every element of the claimed subject matter and as such cannot be said to anticipate claim. Claim 22 and its dependent claims are therefore patentable over the Rhodes reference.

Claim rejections-35 U.S.C §103

Claims 2, 3 and 8 were rejected under 35 U.S.C. §103 as being unpatentable over the Kim U.S. Publication No. 2001/0038786 in view of Tsai

U.S. Patent No. 6,425,599, New claim 24, which contains similar features as original claim 2, sets forth that the device can be folded with the column and carriage generally parallel. The Examiner, in rejecting claim 2, admitted that the Kim publication is silent regarding folding of the device so that the column and platform of the carriage are generally parallel. In this regard, the Examiner referred to the Tsai Patent for showing a device wherein the column 21 and platform 50 may be folded together. However, it is noted, that the Tsai device does not utilize a carriage which is attached to a column that can be moved up and down with respect thereto. Thus, Tsai presents no teaching for making a carriage that is movable along a column collapsible. Thus the combination of Kim and Tsai does not render obvious the subject matter of claim 24. Additionally, even if the teachings of the Kim and Tsai references could be combined, the resulting combination would not have a platform or carriage that is operatively connected to a column by bearings in the manner claimed. Accordingly, the combination of the Kim and Tsai references would not result in a structure that would render obvious the subject matter of new claim 22. Therefore, claim 22 and its dependent claims are patentable over the Kim and Tsai references.

Previously submitted claims 9 and 10 are rejected as being unpatentable over the Kim publication in view of Rountree U.S. Patent No. 6,561,745. The Rountree patent was cited for showing tie down straps 31, 32 connected to sides of a platform. However, the Rountree patent does not contain any disclosure

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which would overcome the basic deficiency of the Kim patent as discussed above in connection with claim 22. The Rountree patent has a load bearing portion 25 attached to an upright frame portion 21. The load bearing portion 25 is not adapted move along any column. Accordingly, any possible combination of the Kim and Rountree would not result in a structure having a carriage with forks having bearings mounted in channels in a column as set forth in the claims. Accordingly, claim 22 and its dependent claims are patentable over any possible combination of these two references.

Original Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over the Kim U.S. Publication No. 2001/0038786 in view of Hsieh et al U.S. Patent No. 5,951,037. The Hsieh et al patent was cited by the Examiner for its showing of a platform 50 which can be selectively manually lengthened or shortened. However, it is noted that the platform cannot be raised or lowered. Neither of the Kim or Hsieh et al references shows a carriage or platform that is attached to a column for movement there along by means of forks having bearing riding in channels in the column as set forth in new claim 22. Accordingly, claim 22 and its dependent claims are not obvious in view of any possible combination of the Kim and Hsieh references.

Original claim 12 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Hanson U.S. Patent No. 2,778,515. The Hanson patent which was cited for a showing of an upper ball foot disposed at an upper end of a column that engages a surface on which the device is placed

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when the column is horizontal as shown in Figure 5 of that patent. It is submitted first that the Hanson patent merely shows a handle portion resting on the floor rather than a ball foot as set forth in new claim 34. Additionally, the Hanson patent does not contain any disclosure which would overcome the deficiency of the Kim as discussed above. The platform 21 of the Hanson device is fixed to the column and is not adapted to be raised or lowered by means of forks having bearings riding in a column. The Hanson patent contains no disclosure which could be combined with Kim patent that would result in a structure that would render obvious the subject matter of claim 22 and its dependent claims.

Claim 15 was rejected under 35 U.S.C. 103(a) as being unpatentable over the Kim U.S. Publication in view of Lemme et al U.S. Patent No, 4,579,504. The Lemme et al patent was cited for its teaching of a crane structure extending from a column 14. The Lemme patent discloses a crane that is used with a lifting device such as a fork lift. In this case, the fork lift or platform is raised or lowered by means of a chain. There is no specific showing in the Lemme patent as to how the fork lift is attached to the mast 14 for movement relative thereto. Accordingly, this patent contains no disclosures which serve to overcome the basic deficiencies of the Kim publication as set forth above in connection with new claim 22. Therefore, even if the Kim and Lemme et al disclosures could be combined, such combination would not render obvious the subject matter of claim 22 and its dependent claims.

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Claim 16 was rejected as being unpatentable over the Neal Publication in view of the Kim Publication. In this rejection, Kim is cited for a showing where one of the first wheels is driven by a motor. However, neither the Kim publication nor the Neal publication show or suggest a carriage attached to the column by means of spaced forks having bearings that ride in channels in a column as set forth in claim 22. Therefore, there is no possible combination of the Kim and Neal publications that could render obvious the subject matter of claim 22 and its dependent claims. Accordingly claim 22 and its dependent claims are patentable over this combination of references.

Claims 17, 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Neal in view of Johansson U.S. Patent No. 5,951,234. In connection with this rejection, the Johansson patent was cited for its showing of a vertical circular wheel disposed on a horizontal shaft at the end of the chassis 2. The Johansson patent does not disclose a carriage which is attached to a column by means of spaced forks having bearings arranged to ride in channels in the column. Certainly, the Johansson patent has no disclosure which can be combined with the Neal reference would overcome the basic deficiency of the Neal reference as explained above in connection with claim 22. Accordingly, independent claim 22 and its dependent claims are patentable over the combination of the Neal and Johansson patents.

Claims 19 and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Neal in view of Johnson et al U.S. Patent No. 3,445,958.

Johnson was cited for its teaching of wheels that have a relatively soft circular removable covering to facilitate movement over relatively soft terrain. The Johnson et al. patent is related to a toy vehicle wheel. There is no disclosure in that patent that would overcome the basic deficiencies of the Neal patent as mentioned above in connection with Claim 22. Accordingly, even assuming that one would combine the Johnson et al. disclosure, with the Neal disclosure, the resulting combination would not render obvious the subject matter of claim 22 and its dependent claims.

Art of Record

The prior art cited by the Examiner but not applied to the claims has been reviewed. Such art is not deemed pertinent to the claims as now presented. The device in the Kiryu patent, U.S Patent 3,709,322 shows a collapsible hand truck. The platform or carriage shown in that patent is not moveable along a column to raise or lower a load.

In the Dunkle U.S. Patent 5,549,317, the platform 64 is not moveable up and down with respect to the main support frame assembly. In the Fisher U.S. 5,575,605 patent, the disclosed device does not have a carriage with spaced forks having bearings that ride in a channel.

In the device shown in the Audet U.S. Patent 5,938,396, the toolbox 11 is mounted on a support which includes a U-shaped plate which slides on the frame. A winch raises and lowers the support. There are no forks with bearings riding in channels as set forth in the claims. The Krawczyk U.S. Patent

6,131,927 shows a device in the form of a hand truck. Although the platform or carriage is able to pivot into a collapsed position, the platform is not able to be raised with respect to the frame. The device shown in the Prapavat U.S. Patent 6,273,438 is directed to a hand truck of a type that is a different structure as set forth in the claims. The platform 18 is not moveable with respect to the column or the frame as set forth in the claims. The Lee U.S. Patent 6,540,241 is directed to a hand cart. There is no platform moveable with respect to a column or frame in this patent.

The Middleby U.S. Patent No. 6,921,095 discloses a hand trolley which includes a platform member 12 which is raised and lowered along a slide frame. The carriage is slideably mounted to the side frames by way of guides 10 that may include friction reducing rollers. There are no fork members with bearings as set forth in the claims. The Amsili U.S. Patent No. 6,971,654 discloses a hand truck with telescoping segments. The platform 31 can be raised along the frame. However, the platform does not include spaced forks with bearings that ride in channels in a column.

The Burks U.S. Patent No. 6,983,856 merely discloses a portable crane that can be attached to a frame member. The crane does not include any platform or carriage which is raised up along a column. The Burger et al. U.S. Publication No. 2003/0197351 discloses a palette truck that is outfitted with work assist features. This feature includes a work tray which is mounted for adjustable vertical positioning on a central panel 134. There is no disclosure in that patent

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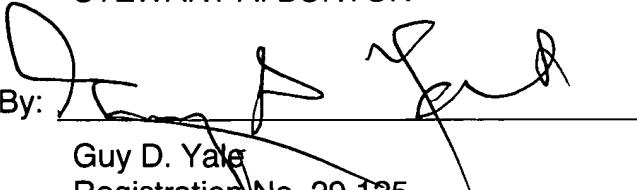
of a platform having forks with bearings on the end which ride in channels in a column member.

CONCLUSION

In view of the above amendments and remarks, it is respectfully submitted that the rejections to the drawings and the objection to claim 1 have been overcome. It is respectfully submitted that all the claims in this case patentably define over the cited art, taken alone or in any possible combination, and that this case is in condition for allowance. Accordingly, favorable consideration of this application by the Examiner is respectfully solicited.

Respectfully Submitted,

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